

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSPTANXR1625

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

NEWS 1 JAN 02 Web Page for STN Seminar Schedule - N. America  
NEWS 2 JAN 02 STN pricing information for 2008 now available  
NEWS 3 JAN 16 CAS patent coverage enhanced to include exemplified prophetic substances  
NEWS 4 JAN 28 USPATFULL, USPAT2, and USPATOLD enhanced with new custom IPC display formats  
NEWS 5 JAN 28 MARPAT searching enhanced  
NEWS 6 JAN 28 USGENE now provides USPTO sequence data within 3 days of publication  
NEWS 7 JAN 28 TOXCENTER enhanced with reloaded MEDLINE segment  
NEWS 8 JAN 28 MEDLINE and LMEDLINE reloaded with enhancements  
NEWS 9 FEB 08 STN Express, Version 8.3, now available  
NEWS 10 FEB 20 PCI now available as a replacement to DPCI  
NEWS 11 FEB 25 IFIREP reloaded with enhancements  
NEWS 12 FEB 25 IMSPRODUCT reloaded with enhancements  
NEWS 13 FEB 29 WPINDEX/WPIX enhanced with ECLA and current U.S. National Patent Classification  
NEWS 14 MAR 31 IFICDB, IFIPAT, and IFIUDB enhanced with new custom IPC display formats  
NEWS 15 MAR 31 CAS REGISTRY enhanced with additional experimental spectra  
NEWS 16 MAR 31 CA/Caplus and CASREACT patent number format for U.S. applications updated  
NEWS 17 MAR 31 LPCI now available as a replacement to LDPCI  
NEWS 18 MAR 31 EMBASE, EMBAL, and LEMBASE reloaded with enhancements  
NEWS 19 APR 04 STN AnaVist, Version 1, to be discontinued  
NEWS 20 APR 15 WPIDS, WPINDEX, and WPIX enhanced with new predefined hit display formats  
NEWS 21 APR 28 EMBASE Controlled Term thesaurus enhanced  
NEWS 22 APR 28 IMSRESEARCH reloaded with enhancements  
NEWS 23 MAY 30 INPAFAMDB now available on STN for patent family searching  
NEWS 24 MAY 30 DGENE, PCTGEN, and USGENE enhanced with new homology sequence search option  
NEWS 25 JUN 06 EPFULL enhanced with 260,000 English abstracts  
NEWS 26 JUN 06 KOREAPAT updated with 41,000 documents  
NEWS 27 JUN 13 USPATFULL and USPAT2 updated with 11-character patent numbers for U.S. applications  
NEWS 28 JUN 19 CAS REGISTRY includes selected substances from web-based collections  
NEWS 29 JUN 25 CA/Caplus and USPAT databases updated with IPC reclassification data

NEWS EXPRESS JUNE 27 08 CURRENT WINDOWS VERSION IS V8.3,  
AND CURRENT DISCOVER FILE IS DATED 23 JUNE 2008

NEWS HOURS STN Operating Hours Plus Help Desk Availability  
NEWS LOGIN Welcome Banner and News Items  
NEWS IPC8 For general information regarding STN implementation of IPC 8

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

FILE 'HOME' ENTERED AT 15:01:17 ON 25 JUN 2008

=> file reg  
COST IN U.S. DOLLARS  
SINCE FILE ENTRY SESSION  
0.21 0.21  
FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 15:01:51 ON 25 JUN 2008  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2008 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 24 JUN 2008 HIGHEST RN 1030471-05-6  
DICTIONARY FILE UPDATES: 24 JUN 2008 HIGHEST RN 1030471-05-6

New CAS Information Use Policies: enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 9, 2008

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www-cas.org/support/stn/gen/stndoc/properties.html>

=> Uploading C:\Program Files\Stnexp\Queries\10566486.str



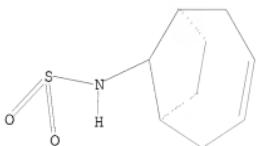
```
chain nodes :  
10 11 12 13 14  
ring nodes :  
1 2 3 4 5 6 7 8 9
```

chain bonds :  
3-10 10-11 10-12 12-13 12-14  
ring bonds :  
1-2 1-7 2-3 2-9 3-4 4-5 4-8 5-6 6-7 8-9  
exact/norm bonds :  
2-9 3-10 4-8 10-12 12-13 12-14  
exact bonds :  
1-2 1-7 2-3 3-4 4-5 5-6 6-7 8-9 10-11  
isolated ring systems :  
containing 1 :

Match level :  
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:CLASS  
11:CLASS 12:CLASS 13:CLASS 14:CLASS

L1 STRUCTURE UPLOADED

=> d 11  
L1 HAS NO ANSWERS  
L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s 11 full  
FULL SEARCH INITIATED 15:02:09 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 496 TO ITERATE  
100.0% PROCESSED 496 ITERATIONS 13 ANSWERS  
SEARCH TIME: 00.00.01

L2 13 SEA SSS FUL L1

=> file caplus  
COST IN U.S. DOLLARS SINCE FILE TOTAL  
FULL ESTIMATED COST ENTRY SESSION  
178.36 178.57

FILE 'CAPLUS' ENTERED AT 15:02:13 ON 25 JUN 2008  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications.

The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 25 Jun 2008 VOL 148 ISS 26  
FILE LAST UPDATED: 24 Jun 2008 (20080624/ED)

Caplus now includes complete International Patent Classification (IPC) reclassification data for the second quarter of 2008.

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

<http://www.cas.org/legal/infopolicy.html>

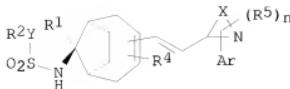
```
=> s 12 full
L3          4 L2

=> d ibib abs hitstr tot
```

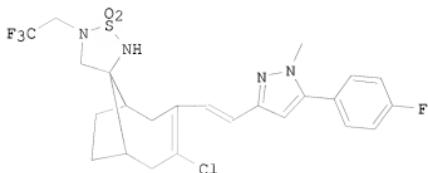
L3 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2005:141037 CAPLUS  
 DOCUMENT NUMBER: 142:240436  
 TITLE: Preparation of spirobicyclononenethiadiazole dioxides and related compounds as  $\gamma$ -secretase inhibitors  
 INVENTOR(S): Bettati, Michela; Boase, Amanda Louise; Churcher, Ian; Ladduwahetty, Tamara; Merchant, Kevin John; Quddus, Abdul  
 PATENT ASSIGNEE(S): Merck Sharp & Dohme Limited, UK  
 SOURCE: PCT Int. Appl., 39 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005014553	A1	20050217	WO 2004-GB3277	20040729
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2004263353	A1	20050217	AU 2004-263353	20040729
CA 2534057	A1	20050217	CA 2004-2534057	20040729
EP 1658272	A1	20060524	EP 2004-743604	20040729
EP 1658272	B1	20070725		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK				
CN 1832927	A	20060913	CN 2004-80022454	20040729
JP 2007501206	T	20070125	JP 2006-522390	20040729
AT 368031	T	20070815	AT 2004-743604	20040729
ES 2289537	T3	20080201	ES 2004-743604	20040729
IN 2006DN00193	A	20070810	IN 2006-DN193	20060110
US 20060189666	A1	20060824	US 2006-566486	20060130
PRIORITY APPLN. INFO.:			GB 2003-18447	A 20030805
			WO 2004-GB3277	W 20040729

OTHER SOURCE(S): CASREACT 142:240436; MARPAT 142:240436  
 GI



I



II

AB Title compds. [I; n = 0, 1; X = atoms to form a 5-6 membered heteroarom. ring; R5 = (halo-substituted) hydrocarbyl; Ar = (substituted) Ph, 6-membered heteroaryl; Y = bond, NR3; R1 = H; R1R3 = CH2; R2 = (halo-substituted) hydrocarbyl, (substituted) 5-6 membered heteroaryl; R2R3 = atoms to form a (substituted) heterocyclic ring of  $\leq 6$  members; R3 = H, alkyl; R4 = halo, alkyl], were prepared as  $\gamma$ -secretase inhibitors (no data). Thus title compound (II) was prepared in several steps from bicyclo[4.2.1]non-3-en-9-one, tert-Bu sulfinamide, F3CCH2NH2, POC13/DMF, and [5-(4-fluorophenyl)-1-methyl-1H-pyrazol-3-yl]methyltriphenylphosphonium chloride.

IT 844880-01-9P

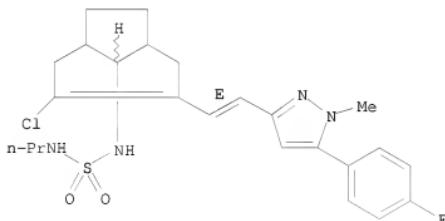
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of spirobicyclononenethiadiazole dioxides and related compds. as  $\gamma$ -secretase inhibitors)

RN 844880-01-9 CAPLUS

CN Sulfonamide, N-[3-chloro-4-[(1E)-2-[5-(4-fluorophenyl)-1-methyl-1H-pyrazol-3-yl]ethenyl]bicyclo[4.2.1]non-3-en-9-yl]-N'-propyl- (CA INDEX NAME)

Double bond geometry as shown.



REFERENCE COUNT:

3

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2003:133023 CAPLUS  
 DOCUMENT NUMBER: 138:169963  
 TITLE: Synthesis of sulfonamido-substituted bridged  
 bicycloalkyl derivatives for control of beta-amyloid  
 production  
 INVENTOR(S): Hannam, Joanne Claire; Harrison, Timothy; Madin,  
 Andrew; Sparey, Timothy Jason  
 PATENT ASSIGNEE(S): Merck Sharp & Dohme Limited, UK  
 SOURCE: PCT Int. Appl., 67 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003013506	A1	20030220	WO 2002-GB3559	20020731
W: AB, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2002355359	A1	20030224	AU 2002-355359	20020731
US 20040186147	A1	20040923	US 2004-484290	20040120
US 7205434	B2	20070417		
PRIORITY APPLN. INFO.:			GB 2001-19152	A 20010806
			WO 2002-GB3559	W 20020731

OTHER SOURCE(S): MARPAT 138:169963  
 GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB Title compds. I [A,B = together with the carbon atoms bonded to L1R4 and H complete a (un)substituted ring containing 5-10 carbon atoms; R1 = H, alkyl, alkenyl; R2 = H, Alkyl; R3 = alkyl, cycloalkyl, alkenyl, alkynyl, aryl, etc.; R4 = H, halo, aryl, heterocyclyl, CN, alkoxy, amino, etc.; L1 = bond, alkylene, etc.] are prepared For instance, Et cyclopentanone-2-carboxylate was reacted with o-xylylene dibromide (DMF, NaOEt) and the resulting adduct treated with LDA in THF at -78° to give II. II was treated in the following manner: i. THF, H2NOH•HCl, NaOAc; ii. HOAc, H2-PtO; iii. CH2Cl3, Et3N, 5-chlorothiophenesulfonyl chloride and iv. THF, LAH to provide sulfonamide III. I modulate the production of  $\beta$ -amyloid from amyloid precursor protein and are useful in the treatment of Alzheimer's disease.

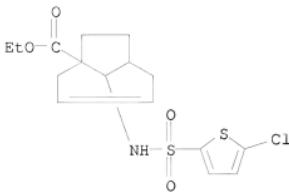
IT 497862-61-0P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)  
 (synthesis of sulfonamido-substituted bridged bicycloalkyl derivs. for control of beta-amyloid production)

RN 497862-61-0 CAPLUS

CN Bicyclo[4.2.1]non-3-ene-1-carboxylic acid, 9-[(5-chloro-2-

thienyl)sulfonyl]amino]-, ethyl ester, (1R,6R,9S)-rel- (CA INDEX NAME)



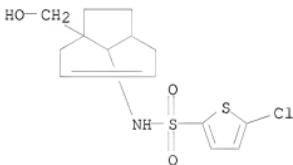
IT 497862-62-1P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(synthesis of sulfonamido-substituted bridged bicycloalkyl derivs. for control of beta-amyloid production)

RN 497862-62-1 CAPLUS

CN 2-Thiophenesulfonamide, 5-chloro-N-[(1R,6R,9S)-1-(hydroxymethyl)bicyclo[4.2.1]non-3-en-9-yl]-, rel- (CA INDEX NAME)



REFERENCE COUNT:

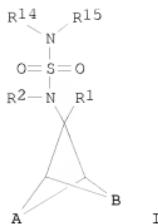
4

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

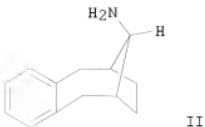
L3 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2002:353420 CAPLUS  
 DOCUMENT NUMBER: 136:369505  
 TITLE: Synthesis of sulfonamido-substituted bridged  
 bicycloalkyl derivatives as  $\gamma$ -secretase  
 inhibitors  
 INVENTOR(S): Collins, Ian James; Hannam, Joanne Claire; Harrison,  
 Timothy; Lewis, Stephen John; Madin, Andrew; Sparey,  
 Timothy Jason; Williams, Brian John  
 PATENT ASSIGNEE(S): Merck Sharp & Dohme Limited, UK  
 SOURCE: PCT Int. Appl., 151 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002036555	A1	20020510	WO 2001-GB4817	20011029
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2427206	A1	20020510	CA 2001-2427206	20011029
AU 2002010747	A	20020515	AU 2002-10747	20011029
EP 1334085	A1	20030813	EP 2001-978652	20011029
EP 1334085	B1	20050824		
R: AT, BE, CH, DE, DK, ES, FR, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2004513108	T	20040430	JP 2002-539315	20011029
JP 3880051	B2	20070214		
AT 302753	T	20050915	AT 2001-978652	20011029
ES 2248397	T3	20060316	ES 2001-978652	20011029
AU 2002210747	B2	20060601	AU 2002-210747	20011029
US 20040049038	A1	20040311	US 2003-415751	20030501
US 7138400	B2	20061121		
JP 2006241163	A	20060914	JP 2006-78136	20060322
PRIORITY APPLN. INFO.:			GB 2000-26827	A 20001102
			GB 2001-22685	A 20010920
			JP 2002-539315	A3 20011029
			WO 2001-GB4817	W 20011029

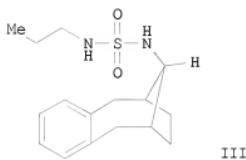
OTHER SOURCE(S): MARPAT 136:369505  
 GI



I



II



III

**AB** Title compds. I [A, B = (CXY)p, (CXY)qCY=CY(CXY)r, (CXY)xNR13(CXY)y, etc.; X = halo, R9, OR9, SR9, S(O)1-2R10, OSO2R9, N(R9)2, COR9, CO2R9, etc.; Y = H, alkyl or X, Y together = O, S, N-OR11, CHR11; provided neither A nor B comprises more than one CXY moiety which is other than CH2; p = 1-6; q, r, x, y = 0-2; provided that at least one of A and B comprises a chain of 2 or more atoms, such that the ring completed by A and B contains at least 5 atoms; R1 = H, alk(en)yl or R1 and R15 together may complete a 5-, 6- or 7-membered cyclic sulfamide; R2 = H, Cl, alkyl, aryl, aryl-alkyl, cycloalkyl, acyl, etc.; R9 = H or R10 or two R9 groups together with a nitrogen atom to which they are mutually attached may complete a pyrrolidine, piperidine, piperazine, etc.; R10 = alkyl, perfluoroalkyl, cycloalkyl, etc.; R11 = H, alkyl, etc.; R14 = H, alkyl, etc.; R15 = H, alkyl or R15 and R1 together complete a 5-, 6- or 7-membered cyclic sulfamide] were prepared. Over 150 synthetic examples were disclosed. For instance, prior art amine II was sulfonylated with catechol sulfate and the intermediate treated with n-PrNH2 (dioxane, 80°C, 1 h) to give III. I are inhibitors of  $\gamma$ -secretase and are cytotoxic with EC50 < 10  $\mu$ M for human app695. Compds. of the invention are useful in the treatment of and/or prevention of Alzheimer's disease.

IT 423167-24-2P

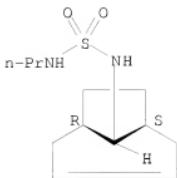
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug; synthesis of sulfonamido-substituted bridged bicycloalkyl derivs. as  $\gamma$ -secretase inhibitors)

RN 423167-24-2 CAPLUS

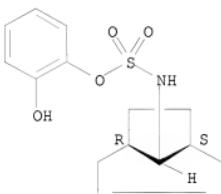
CN Sulfamide, N-(9-syn)-bicyclo[4.2.1]non-3-en-9-yl-N'-propyl- (CA INDEX NAME)

Relative stereochemistry.



IT 423168-72-3P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(intermediate; synthesis of sulfonamido-substituted bridged bicycloalkyl derivs. as  $\gamma$ -secretase inhibitors)  
RN 423168-72-3 CAPLUS  
CN Sulfamic acid, N-(9-syn)-bicyclo[4.2.1]non-3-en-9-yl-, 2-hydroxyphenyl ester (CA INDEX NAME)

Relative stereochemistry.



REFERENCE COUNT:

1

THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2001:713298 CAPLUS  
 DOCUMENT NUMBER: 135:272746  
 TITLE: Synthesis of sulfonamido-substituted bridged  
 bicycloalkyl derivatives as  $\gamma$ -secretase  
 inhibitors  
 INVENTOR(S): Belanger, Patrice Charles; Collins, Ian James; Hannam,  
 Joanne Claire; Harrison, Timothy; Lewis, Stephen John;  
 Madin, Andrew; McIver, Edward Giles; Nadin, Alan John;  
 Neduvelil, Joseph George; Shearman, Mark Steven;  
 Smith, Adrian Leonard; Sparey, Timothy Jason;  
 Stevenson, Graeme Irvine; Teall, Martin Richard  
 PATENT ASSIGNEE(S): Merck Sharp & Dohme Limited, UK; Merck Frosst Canada +  
 Co.  
 SOURCE: PCT Int. Appl., 199 pp.  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001070677	A1	20010927	WO 2001-GB1154	20010315
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KE, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2404125	A1	20010927	CA 2001-2404125	20010315
EP 1268412	A1	20030102	EP 2001-911940	20010315
EP 1268412	B1	20061122		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2003528076	T	20030924	JP 2001-568889	20010315
AU 2001240861	B2	20060330	AU 2001-240861	20010315
AT 346039	T	20061215	AT 2001-911940	20010315
ES 2275657	T3	20070616	ES 2001-911940	20010315
US 20040029862	A1	200404212	US 2003-239233	20030205
US 7365196	B2	20080429		
JP 2006241163	A	20060914	JP 2006-78136	20060322
PRIORITY APPLN. INFO.:			GB 2000-6717	A 20000320
			GB 2000-26827	A 20001102
			WO 2001-GB1154	W 20010315
			GB 2001-22685	A 20010920
			JP 2002-539315	A3 20011029

OTHER SOURCE(S): MARPAT 135:272746  
 GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB Title compds. I [A, B = (CXY)p; (CXY)qCY:CY(CXY)r; (CXY)xNR13(CXY)y; etc.;  
 X = halo, alkoxy, sulf(a/i/o)nyl, amino, acyl, etc.; Y = H, alkyl; or X  
 and Y together represent :O, :S, :N-OR, :CH; provided neither A nor B  
 comprises more than one -CXY-moiety which is other than CH; Z completes a

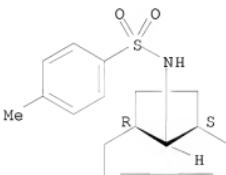
(non)aromatic ring system of 5 to 10 atoms, of which 0 to 3 are selected from N, O and S and the remainder are C; Z1 completes a nonarom. ring system of 5 to 10 atoms, of which 0 to 3 are independently selected from O, N and S and the remainder are C; Z2 completes a 5- or 6-membered heteroaryl ring; m, n = 0 - 1; p = 1 - 6; q, r, = 0 - 2; x, y = 0 - 2; provided that when m = n = 0, at least one of A and B comprises a chain of 2 or more atoms, such that the ring completed by A and B contains at least 5 atoms; R1 = H, alkyl, alkenyl; R2 = H, alkyl, aryl(alkyl), cycloalkyl, acyl; R3 = (cyclo)alkyl, alkenyl, alkynyl, (hetero)arylalkyl, etc.] were prepared Over 270 synthetic examples were disclosed. For instance, 1,2-Bis(bromomethyl)benzene was added to 1-cyclopent-1-enylpyrrolidine (CH3CN, (i-Pr)2NET) to give iminium bromide II. II was converted to the oxime (EtOHaq, NH2OH, NaOAc), the oxime was reduced (HOAc, PtO2, H2 @ 30 psi, 2 h) and the resulting amine sulfonylated (DCM, pyridine, p-TsCl, 16 h) to give III. I are inhibitors of  $\gamma$ -secretase and are cytotoxic with EC50 < 10  $\mu$ M for human app695. Compds. of the invention are useful in the treatment of and/or prevention of Alzheimer's disease.

IT 362654-13-5P 362654-14-6P 362654-15-7P  
 362654-16-8P 362654-17-9P 362654-66-8P  
 362654-67-9P 362654-68-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (drug; synthesis of sulfonamido-substituted bridged bicycloalkyl derivs. as  $\gamma$ -secretase inhibitors)

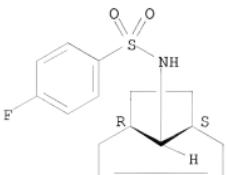
RN 362654-13-5 CAPLUS  
 CN Benzenesulfonamide, N-(9-syn)-bicyclo[4.2.1]non-3-en-9-yl-4-methyl- (CA INDEX NAME)

Relative stereochemistry.



RN 362654-14-6 CAPLUS  
 CN Benzenesulfonamide, N-(9-syn)-bicyclo[4.2.1]non-3-en-9-yl-4-fluoro- (CA INDEX NAME)

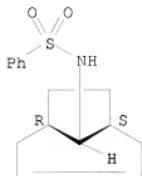
Relative stereochemistry.



RN 362654-15-7 CAPLUS

CN Benzenesulfonamide, N-(9-syn)-bicyclo[4.2.1]non-3-en-9-yl- (CA INDEX NAME)

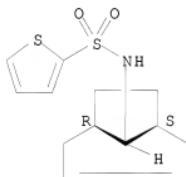
Relative stereochemistry.



RN 362654-16-8 CAPLUS

CN 2-Thiophenesulfonamide, N-(9-syn)-bicyclo[4.2.1]non-3-en-9-yl- (CA INDEX NAME)

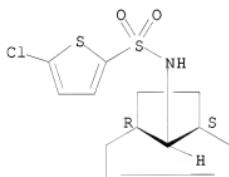
Relative stereochemistry.



RN 362654-17-9 CAPLUS

CN 2-Thiophenesulfonamide, N-(9-syn)-bicyclo[4.2.1]non-3-en-9-yl-5-chloro- (CA INDEX NAME)

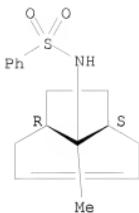
Relative stereochemistry.



RN 362654-66-8 CAPLUS

CN Benzenesulfonamide, N-[(9-syn)-9-methylbicyclo[4.2.1]non-3-en-9-yl]- (CA INDEX NAME)

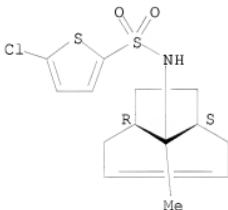
Relative stereochemistry.



RN 362654-67-9 CAPLUS

CN 2-Thiophenesulfonamide, 5-chloro-N-[(9-syn)-9-methylbicyclo[4.2.1]non-3-en-9-yl]- (CA INDEX NAME)

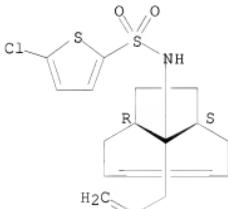
Relative stereochemistry.



RN 362654-68-0 CAPLUS

CN 2-Thiophenesulfonamide, 5-chloro-N-[(9-syn)-9-(2-propen-1-yl)bicyclo[4.2.1]non-3-en-9-yl]- (CA INDEX NAME)

Relative stereochemistry.



REFERENCE COUNT:

13

THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> log y

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	22.28	200.85
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-3.20	-3.20

STN INTERNATIONAL LOGOFF AT 15:02:45 ON 25 JUN 2008